Geometry Honors

Problem Sets

**PS 13:**

1. If , then  2. If , then  3. If , then 

***Find the value of x.***

4.  5. 

6.  7. 

**PS 14:**

***Tell whether the two polygons are always, sometimes or never similar.***

1. Two equilateral triangles. 2. Two isosceles triangles.

3. Two scalene triangles. 4. Two squares.

5. Two rectangles. 6. Two rhombuses.

7. Two isosceles trapezoids. 8. Two regular hexagons.

9. Two regular polygons. 10. A right triangle and an acute triangle.

11. An isosceles triangle and a scalene triangle. 12. A right triangle and a scalene triangle.

***Two similar polygons are shown. Find the values of x, y and z.***



13. 14.

***Plot the given points on graph paper. Draw quadrilateral ABCD and . Locate points and so that is similar to ABCD.***

15. A(0,0), B(4,0), C(2,4), D(0,2), (-10,2), (-2,-2)

16. A(0,0), B(4,0), C(2,4), D(0,2), (7,2), (7,0)

**PS 15:**

1. Complete each statement.

a) \_\_\_\_\_\_ b) 

c)  and  d) x=\_\_\_\_\_ and y=\_\_\_\_\_

***ABCD is a parallelogram. Find the values of x and y.***



2.  3.

**PS 16:**

***Refer to the figure at the right.***

1. If LM=4 and MK=8, find JM. 2. If LM=6 and JM=4, find MK.

3. If JM=3 and MK=6, find LM. 4. If JM=4 and JK=9, find LK.

5. If JM=3 and MK=9, find LJ. 6. If JM=3 and JL=6, find MK.

7. If LK=and MK=6, find JM. 8. If LK=7 and MK=6, find JM.

***Find the value of x, y and z.***

9. 10.



11.  12.